



# Department of Solid Waste Management

*Solid Waste Management*

101 CITY HALL PLAZA  
DURHAM, NC 27701  
P 919.560.4186  
F 919.560.1197

*Donald.Long@durhamnc.gov*

## ***First Year Recycling Recap, Shingle Recycling & E-Waste Handling Program Plan***



# City of Durham & Sonoco Recycling

Recycling Partnership  
2010 Recap



# Overview of Partnership

- City of Durham recycling trucks deliver recyclable material to Sonoco Recycling, located at 4619 Industry Lane, Durham NC 27703. There is no cost from Sonoco Recycling to the City of Durham for this partnership.

- Material is then recovered and processed and sent to various end users including Sonoco Mills. **This material is converted into packaging with recycle content for Sonoco's customers such as:**

- Proctor and Gamble
- Kraft Foods
- Hewlett Packard
- Whirlpool

- Contract started December 14, 2009.
- Contract expires December 14, 2011.

# FY 2011 Highlights



**City of Durham delivered approximately 13,960 tons to Sonoco Recycling between December 2009 - December 2010, with an additional 45 tons from the e-cycling and shredding events. All loads delivered to Sonoco Recycling have been well below the allowable contamination levels established within the contract.**

# Highlights Continued...



## Sonoco Recycling has sponsored three public E-Waste and Shred Day Events.

- **April 2010** – collected 7,640 pounds of paper for shredding and 18,472 pounds of E-Waste for processing.
- **October 2010** – collected 34,600 pounds of paper for shredding and 73,820 pounds of E-Waste for processing.
- **January 2011** - collected 3,600 pounds of cardboard, 30,600 pounds of paper, 59,555 pounds of E-waste and 1,100 pounds of Christmas trees.



# Highlights Continued...

Sonoco Recycling provided City of Durham Solid Waste Staff with 100,000 Recycling Cart Stickers in July of 2010. Stickers help guide residents on acceptable recycling materials that is allowable in the recycling cart.

RECYCLE / RECICLE		 <b>CITY OF DURHAM</b> <a href="http://www.durhamnc.gov/departments/solid">www.durhamnc.gov/departments/solid</a> <i>Remember</i> It is illegal to throw away plastic bottles in NC  FOR HELP CALL PARA AYUDA LLAME AL: <b>919/560.1200</b>   <a href="http://www.sonocorecycling.com">www.sonocorecycling.com</a>	DO NOT RECYCLE / NO RECICLE	
 All paper, junkmail, paperback books (no food residue)	 Glass, tin, metals, aluminum (no scrap metal)		 <b>NO</b> hardback books, foil coated, food contaminated or moisture resistant boxes	 <b>NO</b> paint cans, motor oil, or hazardous waste
 Plastic containers free of hazardous materials and food contamination	 <b>NEW!</b> Rigid plastics made of HDPE must be <2' in length and 40 lbs.	 <b>NO</b> glass cookware / dishes, or lightbulbs	 <b>NO</b> plastic bags, styrofoam, lids, or caps	





# Highlights Continued...

Sonoco Recycling provided funding of \$10,000 to City of Durham to assist in Public Service Announcements, with the goal of increasing recycling awareness and waste reduction opportunities throughout the City.

Sonoco Recycling sent out introduction letters to all Durham Public Elementary Schools. Goal of letter was to provide assistance in increasing recycling awareness throughout schools.

- Letter offered Assembly type education to school.
- Letter offered tour of Raleigh Material Recovery Facility and educational presentation.
- Each Elementary School received a second letter in February 2011.



# In the Future...

In May of 2010, Sonoco Recycling submitted a long term partnership plan with three options for the City of Durham's review. Overall, partnership plan detailed options that would provide City of Durham with revenue options for materials collected.

- Option #1** offered to purchase three walking floor trailers to transport recycled material directly to Sonoco Recycling in Raleigh. Option would allow city to receive revenue for material amounting to \$15 per ton (if the average commodity price falls below \$60 per month no payment will be made). The City has the potential to earn approximately \$209,250 with no liability.

- Option #2** offered to purchase three walking floor trailers to transport recycled material directly to Sonoco Recycling in Raleigh, in addition offered a monthly salary contribution of \$5000 for City Solid Waste Staff. Option would allow city to receive revenue for material at \$10 per ton (if the average commodity price falls below \$60 per month no payment will be made) and \$60,000 per year (to be paid at \$5,000 a month) as an employee salary contribution. The City has the potential to earn approximately \$199,600 with \$60,000 guaranteed with no liability.

- Option #3** offered payment to city for materials delivered directly to Sonoco Recycling in Raleigh at \$15 per ton, regardless of market conditions. The City has the potential to earn approximately \$209,400 in revenue with no liability.

**\*All figures computed with last year's tonnages**





# Comprehensive Solid Waste Disposal Plan

The Department is currently reviewing proposals in order to hire a Consultant to assist the Department with developing and implementing a Comprehensive Solid Waste Disposal Plan.

The Plan will review current transfer station operations, convenience center management, and options for the design and building of a facility that will establish waste diversion as a primary goal.



# Shingle Recycling

## Program Design

# Shingle Recycling – May 1, 2011

Beginning on May 1st, the City of Durham will provide recycling of shingles for customers at the Transfer Station.

## SHINGLE RECYCLING AREA BELOW





# Monitored Shingle Separation

**The Transfer Station permit has been modified to allow the following:**

- **Sorting of shingles at the Transfer Station**

**\*\*Only shingles free of discards will be transported to the selected vendor\*\***

# COST SAVINGS

- Projected diversion of shingles from the waste stream in 2011 is estimated to be 833 tons.
- Projected disposal cost savings  
**=\$35,407**





# E-Waste Recycling

## Program Design





# Collection of Electronics from HHW Site & Transfer Station

Solid Waste Management (SWM) will partner with E-Cycle Secure to dispose of all e-waste free of charge.

By having E-Cycle Secure dispose of all e-waste from the Transfer Station and HHW site, SWM can save an estimated **\$31,000** in contractual services with an existing vendor (Ecoflo) who currently charges SWM for disposal.



# Packaging & Loading of the E-Waste

E-Cycle Secure requires E-waste be:

- Placed on pallets and shrink wrapped
- The vendor will provide the trailers, gaylord boxes, and pallets, if needed
- The vendor will be contacted to collect E-waste when trailers are filled to capacity

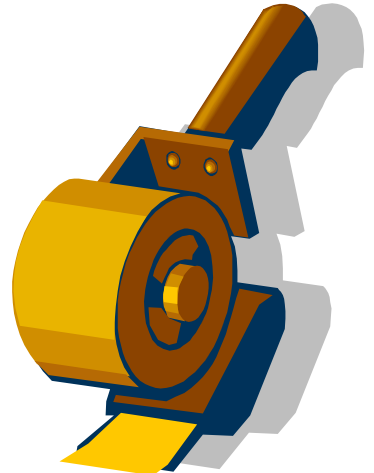
## Equipment Needed

Heavy Duty Hand wrappers- \$89.00 each  
( $\$89.00 \times 2 = \$178.00$ )

Shrink Wrap Rolls-24 rolls/\$336  
( $\$336.00 \times 2 = \$672.00$ )

Pallets provided free of charge

**Projected cost for supplies: \$850  
for a period of six months**



# QUESTIONS

